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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,640	12/02/2005	Erik Oden	ERI0018.US	7283
41863	7590	01/17/2008	EXAMINER	
TAYLOR & AUST, P.C.			ROSS, DANA	
P.O. Box 560			ART UNIT	PAPER NUMBER
142. S Main Street			3722	
Avilla, IN 46710			MAIL DATE	DELIVERY MODE
			01/17/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of Allowability

Application No.

10/559,640

Examiner

Dana Ross

Applicant(s)

ODEN ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/2/05.
2. ☒ The allowed claim(s) is/are 6-10.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 12/2/05;2/3/06
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application
- ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
- ☐ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other _____

Allowable Subject Matter

1. Claims 6-10 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art neither anticipates nor renders obvious a method of measuring a depth of a hole in a grounded composite-material workpiece being machined by an orbital cutting process (independent claims 6 and 7) or an orbital machining apparatus for producing a hole in a composite-material workpiece and measuring a depth of the hole (independent claim 10).

The closest prior art is US Pat. No. 6,663,327 (Linderholm et al.) which teaches the specifics of the orbital machining apparatus.

Linderholm does not disclose the specifics of the measuring element of the method or monitoring a specific character of the electric potential during an advancement of the cutting tool through the workpiece, detecting a point of breaking of the electric circuit when the cutting head of the cutting tool penetrates an opposite second surface of the workpiece. Linderholm does not disclose the low voltage source connected to the rotatable spindle or the measuring element as claimed in the apparatus claim.

US Pat. No. 6,309,151 (Sacchetti) teaches a method and device for controlling the machining depth.

Sacchetti does not disclose the specifics of the orbital machining apparatus and does not disclose the specific combination of limitations for the measuring element, specifically the method of determining the depth of the hole by deducting the predetermined axial length of the cutting head having penetrated the workpiece from a total length of axial advancement of the cutting tool from the first zero reference position to the point of breaking the electric circuit

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through the workpiece (claim 6) or the combination of limitations which include axially backing the cutting tool to make contact with the second surface of the workpiece for determining a second reference position of the cutting tool as it retracts the electric circuit and calculating the depth of the hole produced by the cutting tool by a help of the first zero reference position and the second reference position (claim 7) or the apparatus with the measuring element, specifically the limitations directed towards the electric circuit and first and second reference positions (claim 10).

Therefore the prior art does not anticipate the claimed inventions of independent claims 6, 7 or 10.

Furthermore, there is no motivation found to modify the prior art to obtain the claimed inventions. To modify the prior art to obtain the claimed inventions would require hindsight and furthermore would destroy the workability of the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Ross whose telephone number is 571-272-4480. The examiner can normally be reached on Mon-Thurs.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on 571-272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dana Ross/
Primary Examiner
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